Polycom Phones User Guide

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1 Introduction

Polycom Phones User Guide

This User Guide is written as general guide on how to set up the Polycom phone models: IP 301, IP 320, IP 321, IP 330, IP 331, IP 335, IP 450, IP 501, IP 550, IP 560, IP 601, IP 650 and IP 670 to work with PBXware 3.1.

2 Requirements

1. Identify Polycom Phone Model

- To start and successfully complete registration of your Polycom phone you need to know which phone model you will setup.
- From the back of each Polycom phone there are exact model information that you should check. Although different phone models can have exactly the same requirements and installation procedure, phone models can also have significantly different requirements and installation procedure, so that ignorance of your own model may result in the inability to successfully set up your phone.

2. Phone firmware

- Make sure that your phone is loaded with appropriate firmware version.

model	firmware
IP 301	3.1.x
IP 320	3.3.x
IP 321	3.3.x

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IP 330	3.3.x
IP 331	3.3.x
IP 335	3.3.x
IP 450	3.3.x
IP 501	3.1.x
IP 550	3.3.x
IP 560	3.3.x
IP 601	3.1.x
IP 650	3.3.x
IP 670	3.3.x

- Press **Menu** button, scroll to **Status**, press **select** button, scroll to **Platform** and press **select** button, scroll to **Application** and press **select** button, scroll to **Main** and press **select** button, firmware is displayed, example: **Version 3.3.40085**.

3. DHCP server

Fully configured and operational DHCP server.

4. PBXware version

In order to find out the PBXware version, please login to PBXware and navigate to Settings: About. On the top of "About" page is a code similar to this one "PBXware Edition: Business, Release: 3.1 (041373f), Running: 1.4.24-gc-75ee203", where "Release" denotes the exact version of your PBXware.

3 Installation

This chapter describes how to install and connect the phone to the electrical power and data network as well as how to apply factory settings.

The following topics are covered:

- Power adapter
- Power over Ethernet (PoE)
- Factory Settings

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3.1 Power Adapter

1. Connect the Network and Power

- Connect the DC plug on the power adapter to the DC port on the phone and connect the other end of the power adapter into an electrical power outlet.

- Connect the ethernet cable between the Internet port on the phone and the network port on a router or switch to access LAN.
  NOTE *If you are using Power over Ethernet (PoE), you don't need to connect the AC adapter. Make sure the Ethernet cable and router or switch is Power over Ethernet (PoE) compliant.*

3.2 Power over Ethernet (PoE)

1. Connect the Network (only)

Using a regular ethernet cable, your phone can be powered from a Power over Ethernet (PoE) compliant router or switch.

- Connect the Ethernet cable between the Internet port on the phone and an available port on the in-line power router or switch.
  NOTE *If you are using Power over Ethernet (PoE), you don't need to connect the AC adapter. Make sure the Ethernet cable and router or switch is Power over Ethernet (PoE) compliant.*

3.3 Factory Settings

1. Reset to factory settings

This step is not required for out-of-the-box phones, however, if the phone has been already used then it is a must.

- Press **Menu** button, scroll to **Settings** and press **select** button, scroll to **Advanced** and press **select** button, you'll be asked to enter password, enter your password (default password **456**), press **Enter** soft key under display, scroll to **Admin Settings** and press **select** button, scroll to **Reset to Defaults** and press **select** button, scroll to **Reset to Default** and press select button, scroll to **Reset Device Settings** and press select button.

4 Registering Phone

This chapter describes how to identify Polycom phone model, requirements that must be met and how to register the phone using manual configuration or auto provisioning.

The following topics are covered:

- Manual Configuration
- Auto Provisioning

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4.1 Manual Configuration

This chapter describes how to set UAD settings, create PBXware extension and register the phone.

The following topics are covered:

- UAD Settings
- Creating Extension
- Registering Phone

4.1.1 UAD Settings

1. Login to PBXware web administration interface

- Open a new browser window and enter the IP address in order to access the PBXware web administration login screen. Example: **http://192.168.1.10**
- Login to PBXware with your e-mail address and password.

2. UAD settings

- Navigate to **Settings:UAD**.
- Make sure Polycom UAD is enabled. To check the UAD status click on the **edit** icon corresponding to your Polycom phone.
- Make sure **Status** is set to **Active**, **Auto provisioning** is set to **No**, and **DHCP** is set to **Yes**.

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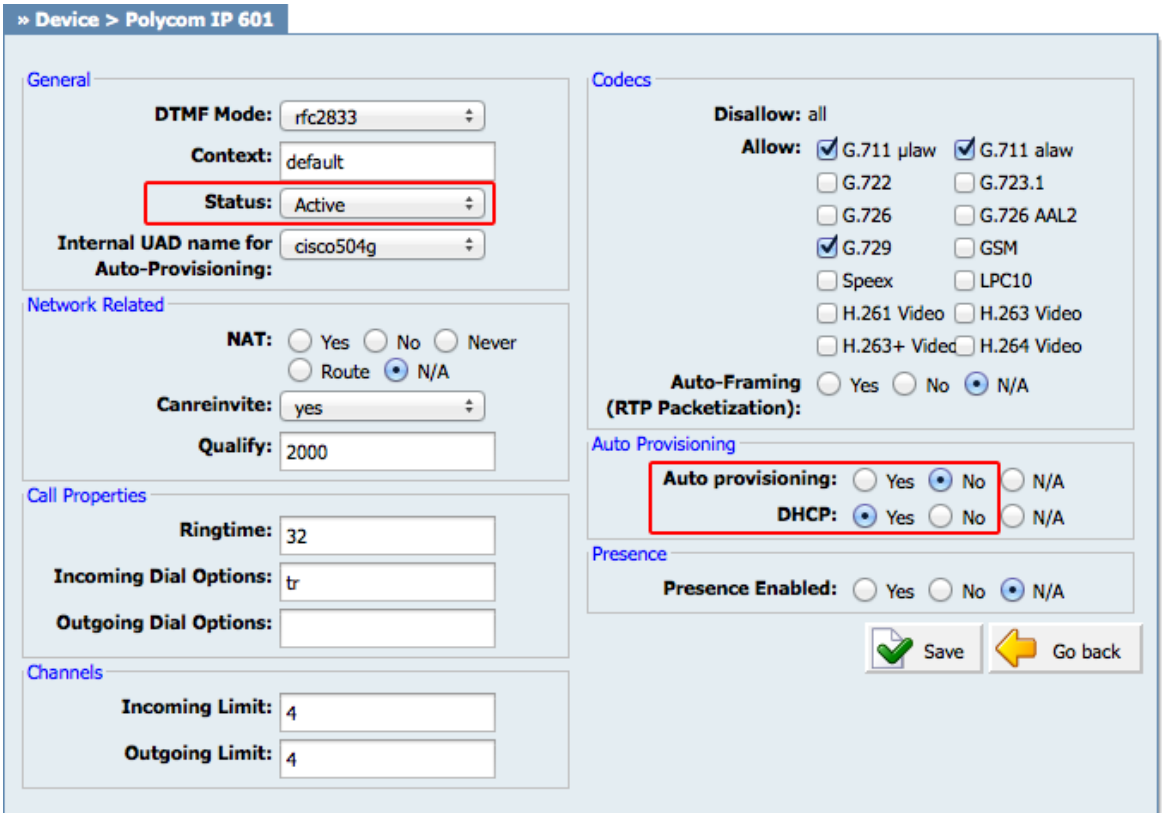

- Click on the **Save** button to save changes.

4.1.2 Creating Extension

1. Add Extension

- Navigate to **Extensions**. Click on **Add Extension**.
- The standard options window will be shown below.
- Select Polycom phone model from the **UAD** select box.
- Select Location: **Local** or **Remote**.
  Local is for all extensions registered on the LAN and **Remote** is for all extensions registered from remote networks, WAN, Internet etc.
- Click on the **Next step** button.

2. Extension values

Enter values into the required field text boxes.

REQUIRED FIELDS

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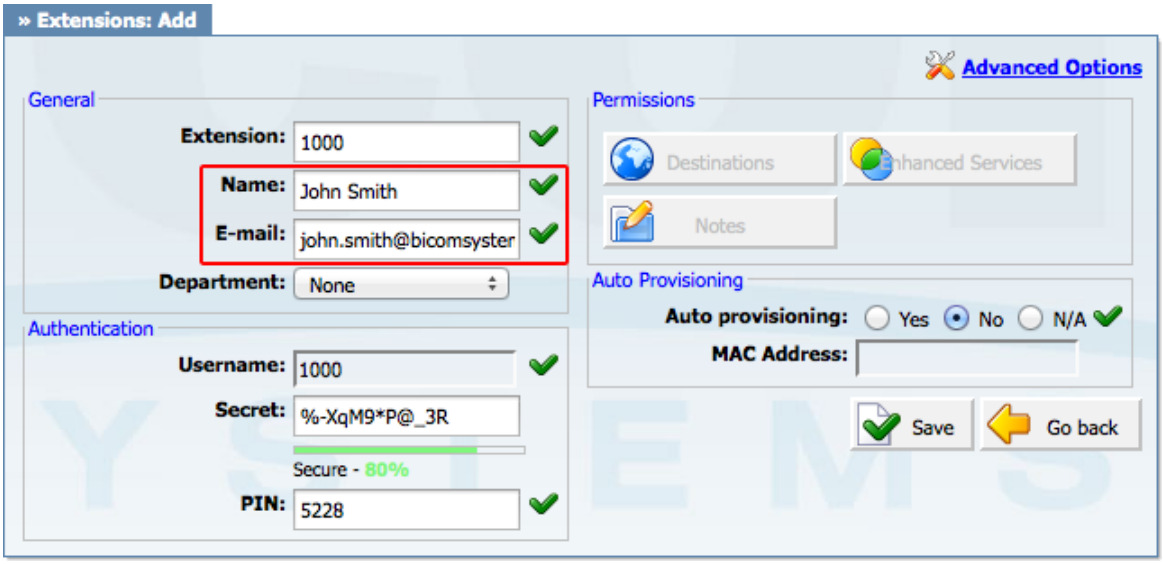
- **Name**
  Enter a name for the extension being created. Example: **John Smith**.

- **E-mail**
  Enter the e-mail address associated with this extension. This e-mail address will receive all system notification messages. Example: **john.smith@bicomsystems.com**



- Click on the **Save** button.

4.1.3 Registering Phone

This chapter describes how to register Polycom phone using **Hostname or IP Address**, or **DNS SRV**.

The following topics are covered:

- Hostname or IP Address
- DNS SRV

4.1.3.1 Hostname or IP Address

1. Configure Line

- Press the **Menu** button on your phone.
- Scroll to **Settings** and press **Select** button.
- Scroll to **Advanced** and press **Select** button.
- Enter **password** and press **Enter** button. Please note, factory default password

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is **456**.

- Press **Select** button to enter **Admin Settings**.
- Scroll to **Line Configuration** and press **Select** button.
- Scroll to **Line 1** and press **Select** button.
- Scroll to **Address** and enter PBXware extension number. Example: **1003**.
- Scroll to **Server 1** and press **Select** button.
- Press **Edit** button to edit **Address** line and enter PBXware IP address. Example **192.168.1.10**. Then press the **Ok** button.
- Press the **Back** button.
- Scroll to **Authentication** and press **Select** button.
- Press **Edit** button to edit **User ID** enter PBXware extension number. Example: **1003**. Then press the Ok button.
- Scroll to **Password** and press **Edit** button, enter secret of the extension as received in the e-mail associated with this extension. Example: **_%Z4M3*Ts9y7**. Then press the **Ok** button.
- Press **Back** button twice, then press **Select** button to **Save Configuration**.
- If everything is done as above described, you should have successfully registered your phone to PBXware. Dial ***123** to verify registration.

4.1.3.2 DNS SRV

This chapter describes how to use a **DNS SRV** record which specifies the location of the PBXware. ***NOTE*** *Your DNS Server needs to be configured correctly for this to work. Bicom Systems can provide service to set up this for you.*

1. Check if the DNS SRV is enabled in your PBXware

- Contact your PBXware administrator to find out if the **DNS SRV** is enabled in your PBXware, or if you have access to the PBXware you can check this yourself.
- Open a new browser window and enter the IP address in order to access the PBXware web administration login screen. Example: **http://192.168.1.10**.
- Login to PBXware with your e-mail address and password.

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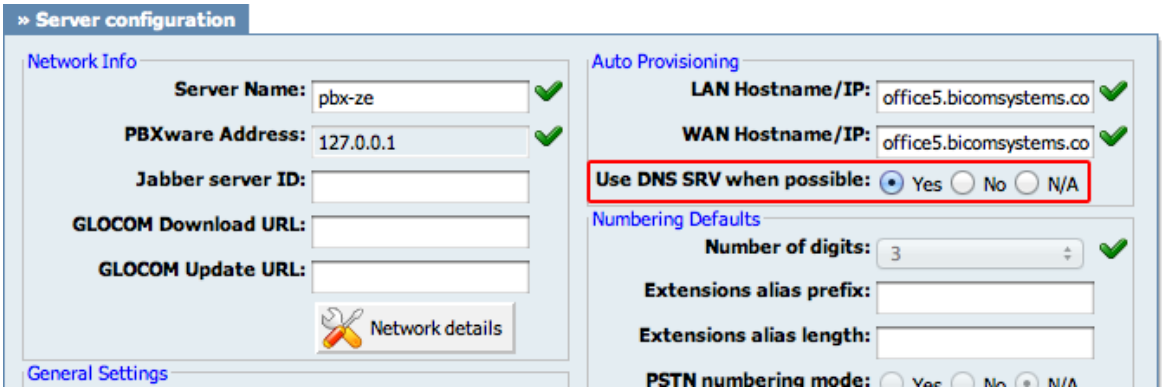
- Navigate to **Settings: Servers**. Click on the server corresponding **edit** button.
- In **Auto Provisioning group**, make sure **Use DNS SRV when possible:** is set to **Yes.** If it is set to **No** or **N/A**, set to **Yes** and click on the **Save** button.
  NOTE *You must re-save all your extensions configured for Auto Provisioning.*



2. Configure Line

- Press the **Menu** button on your phone.
- Scroll to **Settings** and press **Select** button.
- Scroll to **Advanced** and press **Se**lect button.
- Enter **password** and press **Enter** button. Please note, factory default password is **456**.
- Press **Select** button to enter **Admin Settings**.
- Scroll to **Line Configuration** and press **Select** button.
- Scroll to **Line 1** and press **Select** button.
- Scroll to **Server 1** and press **Select** button.
- Press **Edit** button to edit **Address** line and enter the Hostname.

  - Example for the Hostname: **bicomsystems.com**

- Make sure you replace Hostname from this example with your PBXware Hostname.
- Make sure DNS server is configured to automatically route registration request to a PBXware which is actually under another domain name, example: **newbicomsystems.com**.

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- Scroll to **Authentication** and press **Select** button.
- Press **Edit** button to edit **User ID** enter PBXware extension number. Example: **1003**. Then press the Ok button.
- Scroll to **Password** and press **Edit** button, enter secret of the extension as received in the e-mail associated with this extension. Example: **_%Z4M3*Ts9y7**. Then press the **Ok** button.
- Press **Back** button twice, then press **Select** button to **Save Configuration**.
- Auto provisioning process will start during phone reboot process, phone will pickup appropriate configuration file from PBXware. If everything is done as above described, you should have successfully registered your phone to PBXware. Dial ***123** to verify registration.

4.2 Auto Provisioning

This chapter describes how to set UAD settings, create PBXware extension and register the phone using DHCP or Static IP address.

The following topics are covered:

- UAD Settings
- Creating Extension
- Registering Phone

4.2.1 UAD Settings

1. Login to PBXware web administration interface

- Open a new browser window and enter the IP address in order to access the PBXware web administration login screen. Example: **http://192.168.1.10**.
- Login to PBXware with your e-mail address and password.

2. UAD settings

- Navigate to **Settings:UAD**.
- Make sure Polycom UAD is enabled. To check the UAD status click on the **edit** icon corresponding to your Polycom phone.
- Make sure **Status** is set to **Active**, **Auto provisioning** is set to **Yes**, and **DHCP** is set to **Yes**.

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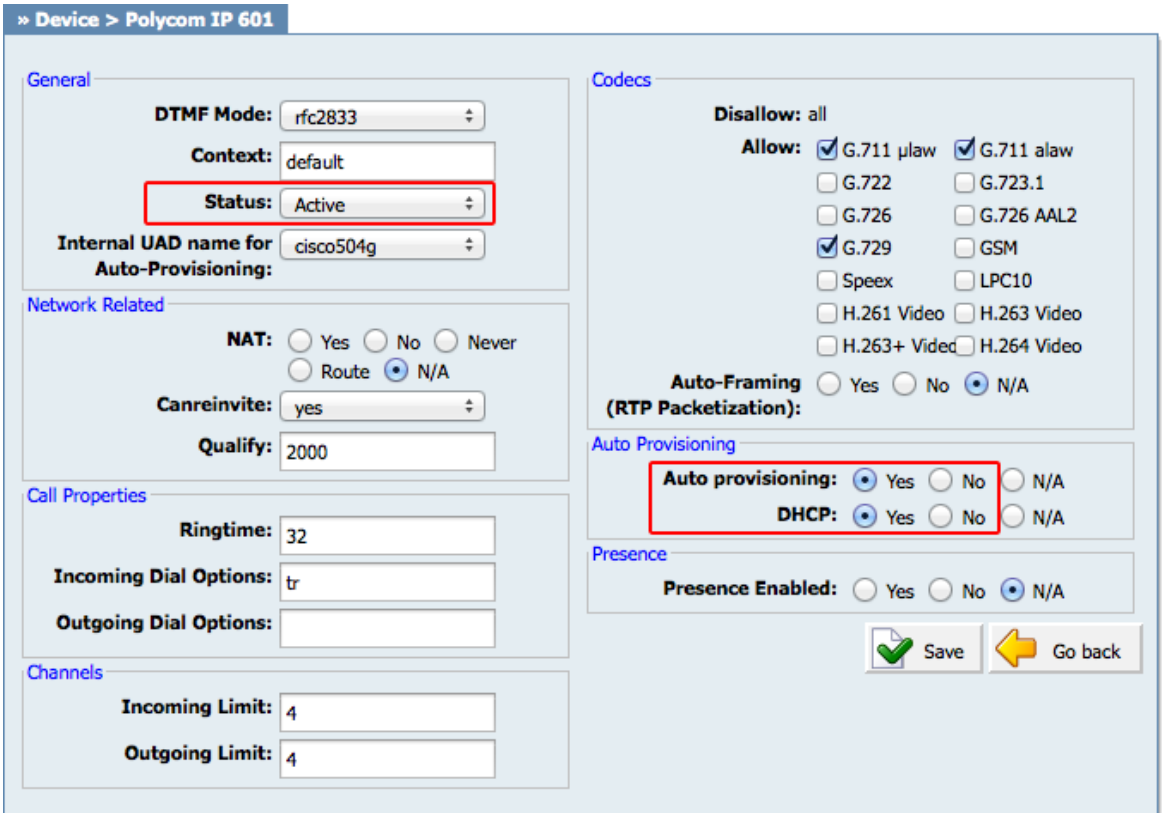

- Click on the **Save** button to save changes.

4.2.2 Creating Extension

1. Add Extension

- Navigate to **Extensions**. Click on **Add Extension**.
- The standard options window will be shown below.
- Select Polycom phone model from the **UAD** select box.
- Select Location: **Local** or **Remote**.
  Local is for all extensions registered on the LAN and **Remote** is for all extensions registered from remote networks, WAN, Internet etc.
- Click on the **Next step** button.

2. Extension values

Enter values into the required field text boxes.

REQUIRED FIELDS

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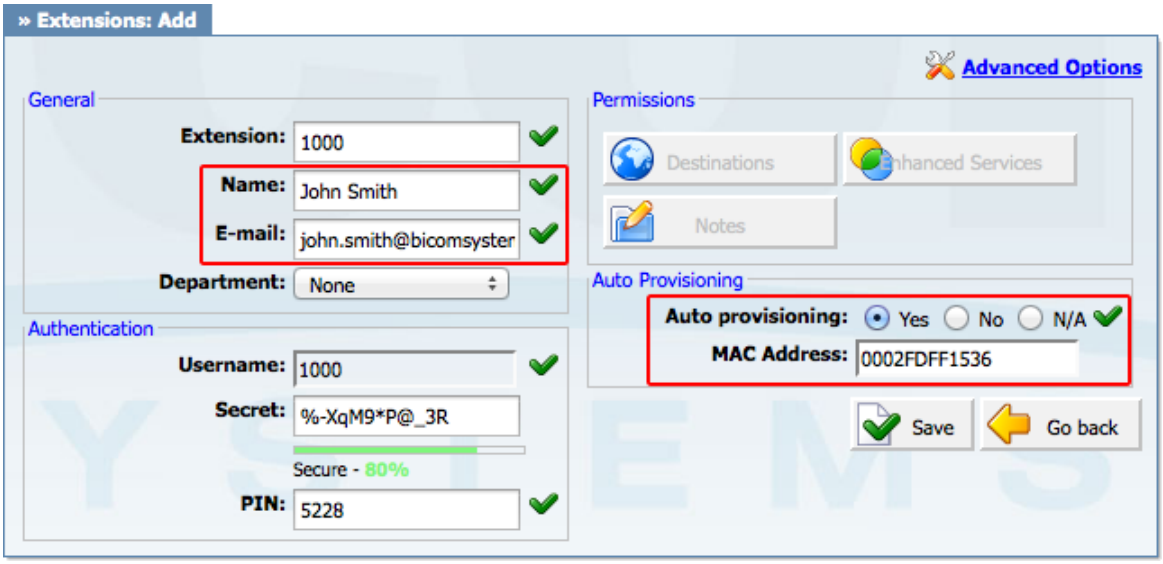
- **Name**
  Enter a name for the extension being created. Example: **John Smith**.

- **E-mail**
  Enter the e-mail address associated with this extension. This e-mail address will receive all system notification messages. Example: **john.smith@bicomsystems.com**

- **Auto Provisioning**
  Set to **Yes**.

- **MAC Address**
  Enter Polycom phone MAC address. Example: **0002FDFF1536**. MAC address can be found at the back of the phone.



- **Additional Config**
  You can set additional settings to be sent to this phones configuration:

o **For BLF/Presence**

<feature feature.1.name="presence" feature.1.enabled="1" >

o **For a custom Digit Map:**

<digitmap dialplan.digitmap="[2-9]11|0T|011xxx.T|[0-1][2-9]xxxxxxxxx|[2-9]xxxxxxxxx|[2-9] xxxT" dialplan.digitmap.timeOut="3"/>

- Click on the **Save** button.

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4.2.3 Registering Phone

This chapter describes how to register Polycom phone using **DHCP**, **TFTP, HTTP & HTTPS** or **DNS SRV**.

The following topics are covered:

- DHCP
- TFTP or HTTP & HTTPS
- DNS SRV

4.2.3.1 DHCP

1. Configure DHCP

- Make sure your DHCP router is configured to use **option 66** to automatically instruct phones with the URL for auto provisioning. For more information refer to your router documentation or contact your network administrator.

2. Phone first boot or user initiated reboot

- Auto provisioning process will start during phone first boot or after reboot process has been initiated by user. DHCP server will instruct the phone where from to pickup appropriate configuration file. If everything is done as above described, you should have successfully registered your phone to PBXware. Dial ***123** to verify registration.

4.2.3.2 TFTP or HTTP & HTTPS

1. Network Configuration

If there is no DHCP in your network, you can still auto provision your Polycom phone. Please refer to your Polycom phone model User Guide for instruction about setting static IP address. After you configure your Polycom phone to use a static IP address, continue with the following steps.

- Press the **Menu** button on your phone.
- Scroll to **Settings** and press **Select** button.
- Scroll to **Advanced** and press **Select** button.
- Enter **password** and press **Enter** button. Please note, factory default password is **456**.
- Press **Select** button to enter **Admin Settings**.
- Press **Select** button to enter **Network Configuration**.

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- Scroll to **Server Menu** and press **Select** button.
- You can use **TFTP** or **HTTP & HTTPS** protocols in order to Auto Provision your Polycom phone.
- Choose which protocol you want to use:

  - TFTP
  - HTTP & HTTPS

4.2.3.2.1 TFTP

- Press **Edit** button to edit **Server Type**, change to **Trivial FTP** and press **Ok** button.
- Scroll to **Server address** and press **Edit** button, then enter **tftp://** followed by **Hostname** or **IP Address**, followed then by **/$MA.cfg.**

  - Example for Hostname: **tftp://voip.bicomsystems.com/$MA.cfg**
  - Example for IP Address: **tftp://192.168.1.10/$MA.cfg**

- Press **Back** button twice, then press **Select** button to **Save Configuration**.
- Auto provisioning process will start during phone reboot process, phone will pickup appropriate configuration file from PBXware. If everything is done as above described, you should have successfully registered your phone to PBXware. Dial ***123** to verify registration.

4.2.3.2.2 HTTP & HTTPS

- Press **Edit** button to edit **Server Type**, change to **Trivial FTP** and press **Ok** button.
- Scroll to **Server address** and press **Edit** button, then enter **http://** or **https://** followed by **Hostname** or **IP Address**, followed then by **/tftp/**

  - Example for Hostname using HTTP: **http://voip.bicomsystems.com/tftp/**
  - Example for Hostname using HTTPS: **https://voip.bicomsystems.com/tftp/**
  - Example for IP Address using HTTP: **http://192.168.1.10/tftp/**
  - Example for IP Address USING HTTPS: **https://192.168.1.10/tftp/**

- Press **Back** button twice, then press **Select** button to **Save Configuration**.
- Auto provisioning process will start during phone reboot process, phone will pickup appropriate configuration file from PBXware. If everything is done as above described, you should have successfully registered your phone to PBXware. Dial

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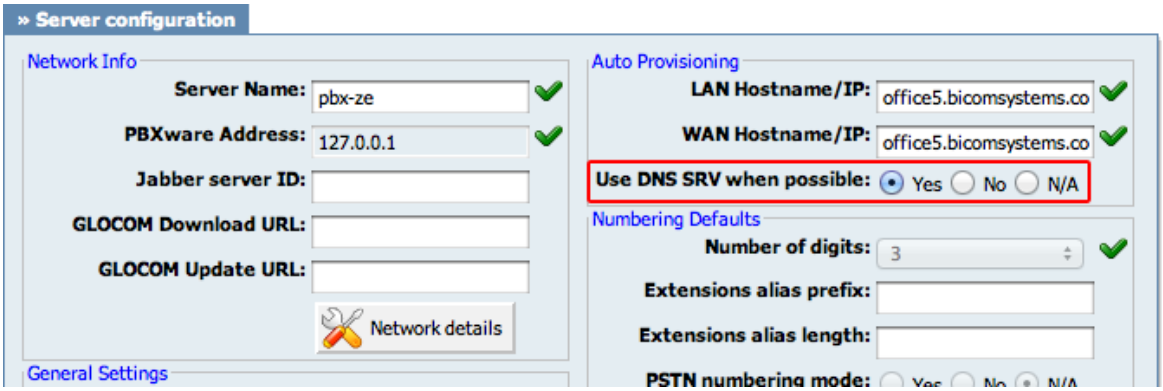
***123** to verify registration.

4.2.3.3 DNS SRV

1. Check if the DNS SRV is enabled in your PBXware

- Contact your PBXware administrator to find out if the **DNS SRV** is enabled in your PBXware, or if you have access to the PBXware you can check this yourself.
- Open a new browser window and enter the IP address in order to access the PBXware web administration login screen. Example: **http://192.168.1.10**.
- Login to PBXware with your e-mail address and password.
- Navigate to **Settings: Servers**. Click on the server corresponding **edit** button.
- In **Auto Provisioning group**, make sure **Use DNS SRV when possible:** is set to **Yes.** If it is set to **No** or **N/A**, set to **Yes** and click on the **Save** button.
  NOTE *You must re-save all your extensions configured for Auto Provisioning.*



- Follow instruction given for registering the phone using TFTP or HTTP & HTTPS.

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